

1 **Reference: “2023 Capital Budget Application,” Newfoundland Power Inc., June 29,**  
 2 **2022, Schedule B, pp. 100–103 (Substation Replacements Due to In-**  
 3 **Service Failures).**

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 5 **Q. Has Newfoundland Power considered replacement of individual substation**  
 6 **assets in a planned manner? If so, please provide a cost-benefit analysis**  
 7 **comparing this approach to Newfoundland Power’s current approach. If not,**  
 8 **why not?**

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 10 A. With respect to substation deficiencies or assets which are possible to manage in a  
 11 planned fashion, Newfoundland Power’s approach is to address them through the  
 12 following projects included in the *2023 Capital Budget Application*:<sup>1</sup>

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 14 (i) *Walbournes Substation Refurbishment and Modernization* project;<sup>2</sup>  
 15 (ii) *Molloy’s Lane Substation Refurbishment and Modernization* project;<sup>3</sup>  
 16 (iii) *Substation Protection and Control Replacements* project;<sup>4</sup>  
 17 (iv) *Substation Ground Grid Upgrades* project;<sup>5</sup> and  
 18 (v) *PCB Bushing Phase-out* project.<sup>6</sup>

19  
 20 These projects address deficiencies identified through engineering assessments on  
 21 specific substation assets, which necessitate the replacement of obsolete and  
 22 deteriorated equipment and infrastructure in a planned fashion.<sup>7</sup>

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 24 The *Substation Replacements Due to In-Service Failures* program involves replacing  
 25 substation equipment that has failed as a result of storm damage, lightning strikes,  
 26 vandalism, electrical or mechanical failure, corrosion damage, technical obsolescence or  
 27 failure during maintenance testing. Substation equipment that fails in service requires  
 28 immediate attention as it is essential to the reliability of supply to customers. Individual  
 29 substation assets that fail in service cannot be replaced in a planned manner.

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<sup>1</sup> Undertaking planned substation refurbishments in this manner has been ongoing since the *2007 Substation Strategic Plan* was introduced in the *2007 Capital Budget Application*. In the *2023 Capital Budget Application*, with the introduction of programs in the Provisional Guidelines, the Company reorganized its substation capital program to reflect the new project and program definitions.

<sup>2</sup> See *2023 Capital Budget Application*, Schedule B, page 77

<sup>3</sup> See *2023 Capital Budget Application*, Schedule B, page 81

<sup>4</sup> See *2023 Capital Budget Application*, Schedule B, page 92

<sup>5</sup> See *2023 Capital Budget Application*, Schedule B, page 95

<sup>6</sup> See *2023 Capital Budget Application*, Schedule B, page 98

<sup>7</sup> The *PCB Bushing Phase-out* project is proposed to comply with federal regulations to remove transformer bushings, breakers and instrument transformers with PCB concentrations of greater than 50 parts per million from service by the end of 2025.